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## ABSTRACT

Distributive justice deals with the fairness of outcomes or rewards while procedural justice deals with the fairness of the rules and processes involved in the distribution of rewards. Two studies were conducted to examine the influence of different social contexts on the effects of procedural (PF) and distributive (DF) fairness. College students (N=584) in the first study read a story describing a college situation in which a professor allocated a course grade to a student. In the second study, college students (N=192) read a story describing a supervisor allocating a pay increase to a worker. The school study used three PF levels; the work study used two PF levels, and both studies used three DF levels. After reading the stories, subjects completed questionnaires which included measures of nine dependent variables. The results indicated that: (1) both PF and DF had strong effects on the affective and social responses studied; (2) PF had much greater influence than DF in the work context, but not in the school context; and (3) the relative impact of PF versus DF varied for different social and affective responses. These findings suggest that PF is quite important and that justice research and theory dealing only with DF is seriously incomplete. The findings also suggest that social and allocation context may influence the roles of PF and DF in their relative impact on social and affective responses. (NRB)

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# PROCEDURAL AND DISTRIBUTIVE JUSTICE EFFECTS: THE ROLE OF SOCIAL CONTEXT

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## ABSTRACT

### PROCEDURAL AND DISTRIBUTIVE JUSTICE EFFECTS: THE ROLE OF SOCIAL CONTEXT

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MOST PREVIOUS WORK ON JUSTICE AND EQUITY FOCUSED ON DISTRIBUTIVE JUSTICE AND UNDEREMPHASIZED THE INFLUENCE OF PROCEDURAL JUSTICE. THE PRESENT RESEARCH EMPHASIZES THE ROLE OF PROCEDURAL FAIRNESS AND COMPARES THE RELATIVE INFLUENCE OF PROCEDURAL AND DISTRIBUTIVE FAIRNESS IN TWO DIFFERENT SOCIAL CONTEXTS. PROCEDURAL AND DISTRIBUTIVE FAIRNESS SERVED AS THE INDEPENDENT VARIABLES IN EXPERIMENTS USING TWO DIFFERENT INSTITUTIONAL AND ALLOCATION CONTEXTS.

1. BOTH PROCEDURAL AND DISTRIBUTIVE FAIRNESS HAD STRONG EFFECTS ON THE AFFECTIVE AND SOCIAL RESPONSES STUDIED.
2. PROCEDURAL FAIRNESS HAD MUCH GREATER INFLUENCE THAN DISTRIBUTIVE FAIRNESS IN A WORK-PAY CONTEXT, BUT NOT IN A SCHOOL-GRADE CONTEXT.
3. THE RELATIVE IMPACT OF PROCEDURAL VS. DISTRIBUTIVE FAIRNESS VARIES FOR DIFFERENT SOCIAL AND AFFECTIVE RESPONSES.

# PROCEDURAL AND DISTRIBUTIVE JUSTICE EFFECTS: THE ROLE OF SOCIAL CONTEXT

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This research focuses on distributive and procedural justice and their effects on social and affective responses. Distributive justice deals with the fairness of outcomes or rewards; procedural justice deals with the fairness of the rules and processes involved in the distribution of rewards. Most past research on justice and equity focused on distributive fairness, ignoring or underemphasizing procedural issues (e.g., Adams, 1965; Adams & Freedman, 1976; Walster, Berscheid & Walster, 1973; Walster, Walster & Berscheid, 1978). However, Thibaut & Walker (1975) demonstrated the importance of procedural fairness in legal situations, and authors such as Deutsch (1975), Folger (1977), and Tyler and Caine (1981) have examined the role of procedural justice in non-legal contexts.

Alexander and Ruderman (in press) have reported a field study comparing the effects of procedural and distributive fairness, measured by survey responses of Federal government workers. They found that both procedural and distributive fairness influenced five criterion variables. Of even greater interest was the finding that procedural fairness accounted for more variance than did distributive fairness on four of the dependent measures: Perceived Conflict or Harmony, Evaluation of Immediate Supervisor, Job Satisfaction, and Trust in Upper Management. Distributive fairness accounted for more variance on only one measure, Turnover Intention. While these results demonstrated the importance of procedural fairness in a real life setting, their interpretation was cautious because the basic data were correlational and only one organizational context was involved.

An experimental research program was developed to study further the relative influence of procedural and distributive justice on social behavior. Two experiments from that program are presented here to examine the influence of different social contexts on the effects of procedural and distributive fairness. The purpose of these two studies was (1) to determine whether the greater influence of procedural fairness found in a work setting would also be demonstrated under controlled experimental conditions, and (2) whether the relative effects of procedural and distributive fairness would be influenced by institutional setting and type of reward being allocated. The dependent variables measured were the five which had yielded significant results in the field study by Alexander and Ruderman (in press), plus four others of theoretical interest. Two of the added measures involved affective responses (Tension/anxiety, Anger) and two involved responses to the allocator (Trust in Immediate Supervisor, Overall Fairness of Allocator).

#### PROCEDURE

In order to control precisely the procedural fairness (PF) and distributive fairness (DF) treatments, the experiments used printed stories which were read by the subjects. In one experiment the story utilized a college situation in which a professor allocated a course grade to a student recipient (School-Grade context). This was very similar to the stimulus situation used by Tyler & Caine (1981). In the other experiment, the story described a private sector work situation in which a supervisor allocated a pay increase to a worker recipient (Work-Pay context). The School-Grade experiment used three PF levels: Very fair, Fair, Unfair. The Work-Pay experiment used two PF levels: Fair, Unfair. In the School-Grade study procedural fairness was varied by manipulating the

class examination procedures used. Procedural fairness was varied in the Work-Pay study by manipulating the performance appraisal system used. Both experiments had three levels of DF: More than deserved (over-reward); deserved (just reward or equity); Less than deserved (underreward). Thus, the School-Grade study had a 3 x 3 factorial design and the Work-Pay study had a 2 x 3 design.

After reading the story each subject responded to a 25 item questionnaire which included manipulation check items and the measures of the nine dependent variables. Some of the measures combined several items on the basis of previous factor analyses, while others were single-item scores. The nine dependent variables of interest in the two studies were: Evaluation of Immediate Supervisor, Perceived Conflict/Harmony, Trust in Upper Management, Trust in Immediate Supervisor, Job Satisfaction, Turnover Intention, Overall Fairness of Allocator, Tension/Anxiety, Anger.

The subjects used were male and female college students. There were 192 subjects in the Work-Pay study and 584 in the School-Grade Study.

## RESULTS

1. ANOVA on the manipulation check items indicated that both the PF and DF treatments were effective, and in the anticipated directions ( $p < .001$  in all instances).

2. ANOVA carried out for the nine dependent variables yielded significant PF main effects on all nine dependent variables in both experiments. Significant main effects for DF were found in all cases except for the following: School-Grade Study, Tension/Anxiety; Work-Pay Study, Tension/Anxiety, Evaluation of Immediate Supervisor. Table I presents these results. For all significant

results, for both PF and DF effects, the fair treatments produced more positive responses than the unfair treatments.

3. The major purpose of the research program was to compare the relative strengths of PF and DF, and the role of different allocation and institutional contexts in influencing any differential effects of PF and DF. We wished to determine the unique effects of procedural and distributive fairness on each of the dependent variables, and then compare those unique effects across experiments. Because correlational approaches permit examination of the strength of a relationship (or proportion of variance accounted for), partial correlations were utilized. One set of correlations was obtained between the procedural fairness treatments and each dependent measure, with the effects of distributive fairness partialled out. Then distributive fairness was correlated with each dependent measure with procedural fairness partialled out. Table II presents the partial correlations obtained in both experiments.

All partial correlations for PF were significant for all nine dependent measures, in both experiments. For DF, eight of nine partial  $r$ 's were significant in the School-Grade study and six of nine were significant in the Work-Pay study.

The partial  $r$ 's were converted to  $z$  coefficients, and the significance of the difference between the  $z$  for PF and the  $z$  for DF was tested for each dependent variable. Table III presents these results.

The differences between procedural fairness and distributive fairness are summarized below, by listing for each experiment those dependent variables which were influenced more by PF and those more influenced by DF.

PF Significantly Greater Than DFSchool-Grade Experiment

Evaluation of Immediate Supervisor  
Overall Fairness of Allocator  
Tension/Anxiety

Work-Pay Experiment

Evaluation of Immediate Supervisor  
Overall Fairness of Allocator  
Tension/Anxiety  
Perceived Conflict/Harmony  
Trust in Upper Management  
Trust in Immediate Supervisor

DF Significantly Greater Than PFSchool-Grade Experiment

Turnover Intention  
Anger  
Job Satisfaction

Work-Pay Experiment

Turnover Intention  
Anger

There was consistency across the two institutional contexts for five of the nine dependent variables, with PF being stronger in both experiments for three dependent measures (Evaluation of Supervisor, Overall Fairness, Tension) and DF being stronger for two (Turnover Intention, Anger). Four of the dependent measures yielded different fairness effects in the two experiments. In the Work-Pay context, PF had significantly greater effects than DF on Perceived Conflict/Harmony, Trust in Upper Management, and Trust in Immediate Supervisor. These differences did not appear in the School-Grade experiment. For the Job Satisfaction measure, DF had a greater effect in the School-Grade context, but not in the Work-Pay experiment.

Finally, these results can be compared to those of the Alexander & Ruderman survey of Federal employees, since five measures from that study were included



in these two experiments. In the Work-Pay experiment the results for the PF-DF comparisons are the same as in Alexander & Ruderman for four of the five measures (Evaluation of Supervisor, Perceived Conflict/Harmony, Trust in Upper Management, Turnover Intention). In the School-Grade experiment the results are the same for only two of the five measures (Evaluation of Supervisor, Turnover Intention).

### DISCUSSION

1. Both the procedural fairness and distributive fairness treatments had strong effects on the dependent variables in both of the institutional contexts studied. Given the primary emphasis of most justice - equity research on distributive justice issues, the strong showing of procedural justice in both allocation contexts is noteworthy. It is essential that research and theory about justice and fairness examine procedural fairness effects as well as distributive fairness effects.

2. Procedural and distributive fairness operated differently on the two affective response measures studied. Only PF had any effect on Tension. For Anger, DF had the much greater effect, although PF had some small influence. This was true in both experiments.

3. In both experiments PF had a significantly greater influence on the judgment of the overall fairness of the allocator, although both PF and DF produced significant results.

4. Procedural fairness had relatively stronger effects than distributive fairness in the Work-Pay context, consistent with the government employee survey results of Alexander & Ruderman (in press). That is, PF yielded stronger effects than DF on a majority of the dependent measures (six out of nine).

5. This relative strength of PF over DF was not demonstrated in the School-Grade context. PF had a greater effect on three measures, DF had a greater effect on three measures, and there were no differences on the remaining three variables. On the surface these results appear to be inconsistent with those of Tyler and Caine (1981) who reported stronger effects for procedural fairness than for distributive fairness. Our School-Grade stimulus materials were modeled on theirs, and were quite similar to their scenarios. However, there was a procedural difference which may help explain the apparent difference in findings for the school-grade context. Tyler & Caine focused only on the dependent variable of "Leadership Endorsement". We attempted to examine a broadier group of social and affective criterion variables. We found some more affected by procedural fairness (e.g., Evaluation of Supervisor, Overall Fairness of Allocator) as Tyler and Caine had for Leadership Endorsement. But we also found certain variables in the School-Grade context more affected by distributive fairness (e.g., Anger, Turnover Intention). Our school-grade study sampled from a wider range of social and affective responses than had Tyler and Caine, and the strength of distributive fairness could be demonstrated on several variables which had not been examined by Tyler and Caine.

6. For five of the nine dependent measures, there was consistency of PF-DF effects across the two experimental contexts. However, on the other four measures there were different findings in the two studies. Thus, while there is some consistency of attitudinal and affective responses across institutional contexts, there also are some important differences between the two settings. This was especially true for measures of trust and perceived conflict. Further examination of the influence of situational context on fairness relationships is

required, using additional institutional and allocation settings (e.g., the family and other close relationships).

#### CONCLUSIONS

The studies reported here make clear that procedural fairness is quite important, and justice research and theory which deals only with distributive fairness (or "equity") is seriously incomplete. However, the findings also suggest that social and allocation context may significantly influence the roles of procedural and distributive fairness in their relative impact on social and affective responses.

## REFERENCES

- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol 2. New York: Academic Press.
- Adams, J.S. & Freedman, S. (1976). Equity theory revisited: Comments and annotated bibliography. In L. Berkowitz & E. Walster (Eds.), Advances in experimental social psychology, Vol. 9. New York: Academic Press.
- Alexander, S. & Ruderman, M. (In press). The role of procedural and distributive justice in organizational behavior. Social Justice.
- Deutsch, M. (1975). Equity, equality and need: What determines which value will be used as the basis for distributive justice? Journal of Social Issues, 31, 137-149.
- Folger, R. (1977). Distributive and procedural justice: Combined impact of "voice" and improvement on experienced inequity. Journal of Personality and Social Psychology, 35, 108-119.
- Thibaut, J. & Walker, L. (1975). Procedural justice: A psychological analysis. Hillsdale, NJ: Erlbaum.
- Tyler, T.R. & Caine, A. (1981). The role of distributional and procedural fairness in the endorsement of formal leaders. Journal of Personality and Social Psychology, 41, 642-655.
- Walster, E., Berscheid, E. & Walster, G.W. (1973). New directions in equity research. Journal of Personality and Social Psychology, 25, 151-176.
- Walster, E., Walster, G.W. & Berscheid, E. (1978). Equity: Theory and research. Boston: Allyn and Bacon.

TABLE 1  
SUMMARY OF ANALYSES OF VARIANCE FOR PROCEDURAL (PF)  
AND DISTRIBUTIVE (DF) FAIRNESS EFFECTS

VARIABLE	EFFECTS	SCHOOL-GRADE EXPERIMENT (N=584)		WORK-PAY EXPERIMENT (N=192)	
		E	P	E	P
EVALUATION OF TEACHER/SUPERVISOR	<u>PF</u>	26.95	<.001	33.66	<.001
	<u>DF</u>	8.26	<.001	0.41	.664
PERCEIVED CONFLICT-HARMONY	<u>PF</u>	21.44	<.001	25.25	<.001
	<u>DF</u>	12.14	<.001	3.59	<.01
TRUST IN UPPER MANAGEMENT	<u>PF</u>	46.61	<.001	100.45	<.001
	<u>DF</u>	31.96	<.001	11.00	<.001
JOB SATISFACTION	<u>PF</u>	49.00	<.001	12.37	.001
	<u>DF</u>	141.65	<.001	8.86	<.001
TRUST IN TEACHER/SUPERVISOR	<u>PF</u>	26.36	<.001	163.71	<.001
	<u>DF</u>	44.90	<.001	10.68	<.001
TURNOVER INTENTION	<u>PF</u>	122.00	<.001	4.26	.040
	<u>DF</u>	202.40	<.001	23.08	<.001
TENSION-ANXIETY	<u>PF</u>	20.57	<.001	5.23	.023
	<u>DF</u>	0.22	.799	0.78	.462
ANGER	<u>PF</u>	22.00	<.001	10.54	.001
	<u>DF</u>	291.19	<.001	174.21	<.001
OVERALL TEACHER/ SUPERVISOR FAIRNESS	<u>PF</u>	213.51	<.001	110.66	<.001
	<u>DF</u>	56.83	<.001	29.85	<.001

NOTE: DEGREES OF FREEDOM FOR BOTH PF AND DF IN SCHOOL-GRADE EXPERIMENT ARE 2; IN WORK-PAY EXPERIMENT, THEY ARE 1 AND 2 RESPECTIVELY.

TABLE II  
PARTIAL CORRELATIONS OF PROCEDURAL (PF) AND DISTRIBUTIVE (DF) FAIRNESS  
WITH DEPENDENT VARIABLES

VARIABLE	SCHOOL-GRADE EXPERIMENT (N=584)				WORK-PAY EXPERIMENT (N=192)			
	PF		DF		PF		DF	
	<u>R</u>	<u>P</u>	<u>R</u>	<u>P</u>	<u>R</u>	<u>P</u>	<u>R</u>	<u>P</u>
EVALUATION OF TEACHER/SUPERVISOR	.28	<.001	.15	<.001	.39	<.001	.01	.471
PERCEIVED CONFLICT- HARMONY	.23	<.001	.16	<.001	.34	<.001	.03	.332
TRUST IN UPPER MANAGEMENT	.30	<.001	.25	<.001	.59	<.001	.32	<.001
JOB SATISFACTION	.34	<.001	.51	<.001	.25	<.001	.29	<.001
TRUST IN TEACHER/ SUPERVISOR	.25	<.001	.28	<.001	.68	<.001	.29	<.001
TURNOVER INTENTION	.46	<.001	.58	<.001	.18	.007	.45	<.001
TENSION-ANXIETY	.19	<.001	.02	.295	.17	.012	.01	.462
ANGER	.23	.01	.63	<.001	.19	.004	.70	<.001
OVERALL FAIRNESS OF TEACHER/SUPERVISOR	.59	<.001	.31	<.001	.57	<.001	.36	<.001

TABLE III  
Z-SCORE TESTS OF SIGNIFICANCE COMPARING STRENGTH OF  
PROCEDURAL (PF) AND DISTRIBUTIVE (DF) FAIRNESS EFFECTS

<u>VARIABLE</u>	<u>SCHOOL-GRADE EXPERIMENT (N=584)</u>		<u>WORK-PAY EXPERIMENT (P=192)</u>	
	<u>Z<sub>PF-DF</sub></u>	<u>P</u>	<u>Z<sub>PF-DF</sub></u>	<u>P</u>
EVALUATION OF TEACHER/ SUPERVISOR	2.39	<.01	3.92	<.01
PERCEIVED CONFLICT-HARMONY	1.31	<.10	3.09	<.01
TRUST IN UPPER MANAGEMENT	0.81	>.10	3.36	<.01
JOB SATISFACTION	-3.48	<.01	-.40	>.10
TRUST IN TEACHER/SUPERVISOR	-0.66	>.10	5.14	<.01
TURNOVER INTENTION	-2.86	<.01	-2.89	<.01
TENSION-ANXIETY	2.90	<.01	1.49	<.10
ANGER	-8.73	<.01	-6.46	<.01
OVERALL FAIRNESS OF TEACHER/SUPERVISOR	6.22	<.01	2.70	<.01

NOTE: POSITIVE Z INDICATES STRONGER PROCEDURAL FAIRNESS EFFECTS;  
NEGATIVE Z DENOTES STRONGER DISTRIBUTIVE FAIRNESS EFFECT.